

Amendments to Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1.-62. (canceled)

Claim 63 (new) An isolated polynucleotide comprising:

- (a) a nucleotide sequence encoding a polypeptide having LPAAT activity, wherein the polypeptide has an amino acid sequence of at least 80% sequence identity, based on the Clustal V method of alignment, when compared to SEQ ID NO:56, or
- (b) a full complement of the nucleotide sequence.

Claim 64. (new) The polynucleotide of Claim 63, wherein the amino acid sequence of the polypeptide has at least 85% sequence identity, based on the Clustal V method of alignment, when compared to SEQ ID NO:56.

Claim 65. (new) The polynucleotide of Claim 63, wherein the amino acid sequence of the polypeptide has at least 90% sequence identity, based on the Clustal V method of alignment, when compared to SEQ ID NO:56

Claim 66. (new) The polynucleotide of Claim 63, wherein the amino acid sequence of the polypeptide has at least 95% sequence identity, based on the Clustal V method of alignment, when compared to SEQ ID NO:56.

Claim 67. (new) The polynucleotide of Claim 63, wherein the amino acid sequence of the polypeptide comprises SEQ ID NO:56.

Claim 68. (new) The polynucleotide of Claim 63 wherein the nucleotide sequence comprises SEQ ID NO:55.

Claim 69. (new) A vector comprising the polynucleotide of Claim 63.

Claim 70. (new) A recombinant DNA construct comprising the polynucleotide of Claim 63 operably linked to at least one regulatory sequence.

Claim 71. (new) A method for transforming a cell, comprising transforming a cell with the polynucleotide of Claim 70.

Claim 72. (new) A cell comprising the recombinant DNA construct of Claim 70.

Claim 73. (new) A method for producing a plant comprising transforming a plant cell with the polynucleotide of Claim 70 and regenerating a plant from the transformed plant cell.

Claim 74. (new) A plant comprising the recombinant DNA construct of Claim 70.

Claim 75. (new) A seed comprising the recombinant DNA construct of Claim 70.

Claim 76. (new) An isolated polypeptide having LPAAT activity, wherein the polypeptide has an amino acid sequence of at least 80% sequence identity, based on the Clustal V method of alignment, when compared to SEQ ID NO:56.

Claim 77. (new) The polypeptide of Claim 76, wherein the amino acid sequence of the polypeptide has at least 85% sequence identity, based on the Clustal V method of alignment, when compared to SEQ ID NO:56.

Claim 78. (new) The polypeptide of Claim 76 wherein the amino acid sequence of the polypeptide has at least 90% sequence identity, based on the Clustal V method of alignment, when compared to SEQ ID NO:56.

Claim 79. (new) The polypeptide of Claim 76, wherein the amino acid sequence of the polypeptide has at least 95% sequence identity, based on the Clustal V method of alignment, when compared to SEQ ID NO:56.

Claim 80. (new) The polypeptide of Claim 76, wherein the amino acid sequence of the polypeptide comprises SEQ ID NO:56.

Claim 81. (new) A method for isolating a polypeptide having LPAAT activity comprising isolating the polypeptide from a cell or culture medium of the cell, wherein the cell comprises a recombinant DNA construct comprising the polynucleotide of Claim 63 operably linked to at least one regulatory sequence.

Claim 82. (new) A method of altering the level of expression of an LPAAT in a host cell comprising: (a) transforming a host cell with the recombinant DNA construct of Claim 70; and (b) growing the transformed host cell under conditions that are suitable for expression of the recombinant DNA construct wherein expression of the recombinant DNA construct results in production of altered levels of oil content in the seed, stem, and leaf in the transformed host cell.